```
\begin{matrix} \mathbf{v} & \mathbf{v} 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-11-174-150-47
                                      170
169.5
169.5
167
110.5
111.5
110.5
110.5
110.5
110.5
104.5
104.5
104.5
104.5
104.5
104.5
104.5
104.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.5
105.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             È
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ζ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ۲.,
                                                                                                                                                                                                                                                                ; Search time 18 Seconds (without alignments) 248.599 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 47,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MPGWLTLPTLCRFLLWAFTI.....RGFPRPQQAAYGXXCYAENX 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Published Applications AA New:*

1: /cgn2_6/ptodata/1/pubpaa/USO8 NEW PUB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/USO6 NEW PUB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/USO7 NEW PUB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/USI0 NEW PUB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/USI0 NEW PUB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/USI0_NEW_PUB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/USI0_NEW_PUB.pep:*
GenCore version 5.1.7
(c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-11-128-059-76
US-11-128-059-88
US-11-128-059-86
US-11-128-059-92
US-11-128-059-92
US-11-128-059-94
US-11-128-059-94
US-10-453-372-254
US-10-453-372-256
US-11-128-059-96
US-11-128-059-96
US-11-128-059-96
US-11-128-059-96
US-11-128-059-96
US-11-128-059-90
US-11-128-059-90
US-11-128-059-90
US-11-128-059-90
US-11-128-059-90
US-11-128-059-90
US-11-453-372-238
US-10-453-372-238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-453-372-250
US-10-453-372-210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97014 segs, 13122538 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                          Pebruary 10, 2006, 16:29:52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                              protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-613-076-48
1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
Match 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            189.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
1173.5
117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
                                                                                                                                                                                   •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88
                                                                                                                                                                              OM protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum |
Maximum |
                                                                                                                                                                                                                                   c
Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
```

```
26 170 9.2 2313 7 US-11-128-059-80 Sequence 80, Appl 29 170 9.2 2358 7 US-11-128-059-74 Sequence 74, Appl 29 169-5 9.1 2417 6 US-10-453-372-228 Sequence 228, Appl 30 169 9.1 552 6 US-10-453-372-234 Sequence 2.4 Appl 31 167 9.0 552 6 US-10-453-372-248 Sequence 2.4 Appl 32 166 8.9 1431 7 US-11-128-059-2 Sequence 2.4 Appl 33 164 8 552 6 US-10-453-372-248 Sequence 2.4 Appl 33 110.5 6.0 124 7 US-11-128-059-70 Sequence 2.4 Appl 35 11.0 5.9 322 7 US-11-128-059-64 Sequence 6.4 Appl 37 110 5.9 322 7 US-11-128-059-70 Sequence 6.4 Appl 37 110 5.9 322 7 US-11-158-753-5 Sequence 6.4 Appl 39 104.5 5.6 98 7 US-11-158-753-5 Sequence 219, Appl 40 104.5 5.6 98 7 US-11-136-550-219 Sequence 219, Appl 41 104 5.6 250 7 US-11-186-731-5 Sequence 219, Appl 44 102.5 5.5 99 7 US-11-186-731-5 Sequence 211, Appl 44 102.5 5.5 99 7 US-11-186-731-5 Sequence 221, Appl 44 102.5 5.5 99 7 US-11-136-250-219 Sequence 221, Appl 44 102.5 5.5 99 7 US-11-136-250-221 Sequence 221, Appl 44 102.5 5.5 99 7 US-11-136-250-221 Sequence 221, Appl 45 102.5 5.5 99 7 US-11-136-250-221 Sequence 221, Appl 45 102.5 5.5 99 7 US-11-136-250-221 Sequence 221, Appl 45 102.5 5.5 99 7 US-11-136-250-221 Sequence 221, Appl 45 102.5 5.5 99 7 US-11-136-250-221 Sequence 221, Appl 45 102.5 5.5 99 7 US-11-136-250-221 Sequence 671, Appl 45 102.5 5.5 99 7 US-11-136-250-221 Sequence 671, Appl 45 102.5 5.5 99 7 US-11-136-250-221 Sequence 671, Appl 45 102.5 5.5 99 7 US-11-136-250-221 Sequence 671, Appl 45 102.5 5.5 99 7 US-11-136-250-221 Sequence 671, Appl 45 102.5 5.5 99 7 US-11-136-250-221 Sequence 671, Appl 45 102.5 5.5 99 7 US-11-136-250-221 Sequence 671, Appl
```

ALIGNMENTS

```
ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     129 ELINGIEDESVALTLSLEGVVFPYOPSRGRYOFNYYEAKOACEEODGRLATYSOLYQAWT 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EGLDWCNAGWLLEGSVRYPVLTARAPCGGRG-----RPGIRSYGPRDRMRDRYD 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WSK-VEPGELRETLILITNGLHARGYGPLGGRARMRRGHRLDASLVIAGVRLEDEGRYRC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IPHKAQGDPAS-----HPGPHYLLPPIHEVIHSHRGATATLPCVLGTTPPSY-----KVR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 40.1%; Score 744.5; DB 7; Length 402; Best Local Similarity 46.2%; Pred. No. 1.2e-60; Matches 158; Conservative 43; Mismatches 104; Indels 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _
=
=
=
yearliants. 150-49.

yearliants. 150-49.

yearliants. 150-49.

yearliants. 150-49.

yearliants. 150-60.

yearliant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 402
TYPE: PRT
ORGANISM: Homo sapiens
```

```
9, Appli
6, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Appl:
                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 213,
                                                                                                                                       1857

1 MPGWLTLPTLCRFLLWAFTI.....FGFPRPQQAAYGXXCYAENX 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence Sequence S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence Sequence S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                                                                                                         Issued Patents AA:*

(cgn2_6/ptodata/1/iaa/5_COMB.pep:*

(cgn2_6/ptodata/1/iaa/6_COMB.pep:*

(cgn2_6/ptodata/1/iaa/H_COMB.pep:*

(cgn2_6/ptodata/1/iaa/PCTUS COMB.pep:*

(cgn2_6/ptodata/1/iaa/RE_COMB.pep:*

(cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-906-700-213

US-09-906-700-213

US-09-904-920A-213

US-09-909-064-213

US-09-906-618-213

US-09-906-618-213

US-09-906-618-213

US-09-906-618-213

US-09-906-713-213

US-09-906-713-213

US-09-906-713-213

US-09-906-713-213

US-09-906-713-213

US-09-906-713-213

US-09-906-713-213

US-09-906-713-213

US-08-225-4778-9

US-08-225-4778-9

US-08-225-4778-9

US-08-255-4778-9

US-08-255-4778-9

US-08-255-4778-9
                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                   572060 segs, 82675679 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUMMARIES
                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                 - protein search, using sw model
                                                                                                                                                                                           Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                    seq length: 0
seq length: 200000000
                                                                                                                           US-10-613-076-48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query
Match Length
                                                                                                                                                                             BLOSUM62
                                                                                                                                          Perfect score:
                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                857.5
8857.5
8857.5
8857.5
8857.5
8857.5
8857.5
8857.5
8857.5
8857.5
8857.5
8857.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        564
550
546.5
546.5
543
543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    576.5
                                                                                                                                                                                                                                                                    Minimum DB 6
Maximum DB 6
                                                  OM protein
                                                                                                                                                       Sequence:
                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                           Database
                                                                             Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Result
No.
```

Sequence 3, Appli Sequence 20, Appli Sequence 4, Appli Sequence 4, Appli Sequence 4, Appli Sequence 4, Appli Sequence 12, Appli	PCT-US95-03747-3 US-09-010-147B-20 US-10-188-495-71 US-08-242-097-4 US-09-206-695-4 US-09-799-118-4 US-09-466-778-12	4001000	908 528 988 988 272	21.7 20.7 20.7 18.2 18.2 11.0	20 20 20 20 20 20 20 20 20 20 20 20 20 2	W 4 4 4 4 4 4 4 9 0 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
Sequence 3, Appli	US-08-225-477B-3	н·	329	26.4	490	7.
'n.	PCT-US95-04353-5	4	328	27.3	506.5	36
'n	US-08-225-477B-5	Н	328	27.3	506.5	35
-	5180808-2	ø	2409	27.8	517	34
Sequence 398, App	US-09-949-002-398	~	2415	28.1	522	33
Sequence 314, App	US-09-949-002-314	7	2316	28.1	522	32
	US-10-188-495-72	~	883	28.5	528.5	31
Sequence 6, Appli	US-10-195-970-6	~	883	28.5	529.5	30
Sequence 3, Appli	US-10-195-970-3	N	883	28.5	529.5	53
œ`	PCT-US95-04353-8	4	7/7	7.07	200	,

ALIGNMENTS

```
APPLICANT: Gurney, Austrin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Pan, James
APPLICANT: Pan, James
APPLICANT: Pan, James
APPLICANT: Pan, James
APPLICANT: Stewart, Timothy A.
APPLICANT: Stewart, Timothy A.
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: William, I.
ITILE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
ITILE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT PILING DATE: 2001-07-17
PRIOR PILING DATE: 2000-02-22
PRIOR PAPLICATION NUMBER: US 60/145,698
PRIOR PILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR PILING DATE: 1999-07-28
PRIOR PILING DATE: 1999-07-28
PRIOR PILING DATE: 1999-07-28
PRIOR PILING DATE: 1999-09-08
PRIOR PILING DATE: 1999-09-13
PRIOR PILING DATE: 1999-09-13
PRIOR PILING DATE: 1999-09-15
Sequence 213, Application US/09907794A Patent No. 6635468
                                                                                                                                                                                                                                                                                                                                                                                                                               Godowski, Paul J.
Grimaldi, Christopher J.
Grimaldi, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
                                                                                                                                                                                                                                 Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                  Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, A.
                                                                                     APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
                                                                                                                                                                              Desnoyers, Luc
Eaton, Dan L.
                                                        GENERAL INFORMATION:
                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
```

Sequence

US-10-188-495-61 US-08-225-477B-8

Sequence Sequence

Sequence

Sequence Sequence AAAAAAAAAAAAAAAA

Mon

```
PRIOR FILING DATE: 20U0-01-25
PRIOR APPLICATION UNDRER: US 09/496,914
PRIOR FILING DATE: 2000-02-03
PRIOR FILING DATE: 2000-02-28
PRIOR FILING DATE: 2000-03-07
PRIOR PLILING DATE: 2000-03-07
PRIOR PLILING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: US 09/519,705
PRIOR PLILING DATE: 2000-03-31
PRIOR FILING DATE: 2000-03-31
PRIOR FILING DATE: 2000-04-18
PRIOR FILING DATE: 2000-04-18
PRIOR FILING DATE: 2000-04-18
PRIOR FILING DATE: 2000-05-18
NUMBER OF SEQ ID NOS: 924
SOFTWARE: pt_ Ft_ genes Version 5.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 99.9%;
Best Local Similarity 99.4%;
Matches 338; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 340
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-112-944-397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       App
App
App
App
App
App
App
App
App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 397, App
Sequence 48, Appl
                                                                                                              February 10, 2006, 16:29:01; Search time 179 Seconds (without alignments) 795.977 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                    1 MPGWLTLPTLCRFLLWAFTI......RGPPRPQQAAYGXXCYAENX 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Published Applications AA Main:*
| cgm2 6/ptodata/1/pubpaa/USO 7 PUBCOMB.pep:*
|: /cgm2 6/ptodata/1/pubpaa/USOB PUBCOMB.pep:*
GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-112-944-397

US-09-948-820-48

US-10-014-88-20-48

US-10-091-488-205

US-10-091-438-205

US-10-091-438-205

US-09-909-320-213

US-09-909-320-213

US-09-902-883-213

US-09-907-844-213

US-09-907-844-213

US-09-907-844-213

US-09-907-842-213

US-09-907-842-213

US-09-906-313-213

US-09-906-313-213

US-09-906-313-213

US-09-906-313-213

US-09-906-313-213

US-09-906-313-213

US-09-907-942-213

US-09-907-942-213

US-09-907-942-213

US-09-907-942-213

US-09-907-942-213

US-09-907-942-213

US-09-907-942-213

US-09-907-942-213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-906-646-213
US-09-906-700-213
US-09-903-786-213
                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                        1867569 seqs, 417829326 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 08
Maximum Match 1008
Listing first 45 summaries
                                                                               OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                            BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                     seq length: 0
seq length: 200000000
                                                                                                                                                                                           US-10-613-076-48
1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Perfect score:
                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1856
1855
1390
1390
1348
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
857.5
                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database:
                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                         Sequence:
                                                                                                                    Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Result
```

ö

Gaps

ö

Length 340; Indels

Score 1856; DB 4; ; Pred. No. 1.1e-152; 0; Mismatches 2;

	Sequence 213, App	213,	213,	213,	213,	213,	213,	213	213,	213	213,	213	213,	213,	213,	213,	213,															Ţ								
m	Ω.		_	~	_	_		•		. ~	. ~				_	_	_	·														יר יה יהיות								
US-09-902-903-213	US-09-903-749A-21	US-09-904-119-213	US-09-904-956-213	US-09-902-736-213	US-09-907-794-213	US-09-903-943-213	US-09-904-462-213	US-09-907-925-213	US-09-902-692-213	18-09-903-520-21	US-09-905-056-213	US-09-909-064-213	US-09-904-553-213	US-09-905-381-213	US-09-904-485-213	US-09-905-348-213	US-09-905-088-213	ALIGNMENTS	1	US/10112944	4											212300000000000000000000000000000000000	o. Uszavavatszasza nucze Secreted Polypeptides	4	CURRENT APPLICATION NUMBER: US/10/112,944	-28	PRIOR APPLICATION NUMBER: US 09/488,725		APPLICATION NUMBER: US 09/491,404	
													360 3						l		VC-70-00-0	Tom	Yonghong	Gezhi	016	Aidona J.	ian-Rui	, Tom	Ghosh, Malabika	Dunru1	Oing A.		4		NUMBER: U	: 2002-03-28	UMBER: US	FILING DATE: 2000-01-21	UMBER: US	2000-01-25
	46.2	46.	46.	46.	46.	.46.	46.	46.	46.	46	46.	46.		46.	46.	46.	46.		397	14	RWATION:	Tang, Y.		Weng, G	zhang,	Xue. Aidong	Wang, Jian-Rui	Wehrman, Tom	Ghosh,			TANTEMETON, NO	INVENTION:	NCE: 805	LICATION	FILING DATE:	CATION N	G DATE:	CATION N	FILING DATE:
857		857	857	857	857	857	857	857	857	857	857	857	41 857.5	857	857	857	857		RESULT 1 US-10-112-944-397	Sequence 397, A	GENERAL INFORMATION:	APPLICANT:		APPLICANT:	APPLICANT:	APPLICANT:	APPLICANT:	APPLICANT:	APPLICANT:	APPLICANT:	APPLICANT:	TTTT OF IN	öö	RFE	RRENT APP	CURRENT FIL	IOR APPLI			PRIOR FILIN
	~	9	e	e	e	m	E	e	m	ď	m	4	. 4.	4	4	4	4		RESULT US-10-	Sed		AP	, AP	A.	A A P	4 4	AP.	, AP	A.	A .	A A	¥ E	H	F	₽ -	₹ •	- E	PR	- A	PR

```
2006, 16:19:59 ; Search time 203 Seconds (without alignments) 738.070 Million cell updates/sec
                                                                                                                                                                                                                                 1 MPGWLTLPTLCRFLLWAFTI.....RGFPRPQQAAYGXXCYAENX 341
GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                                                                                                                        2443163
                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                2443163 seqs, 439378781 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                              OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                      BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                geneseqp2003as;*
geneseqp2003bs;*
geneseqp2004s;*
geneseqp2005s;*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Geneseq 21:*
geneseqp1980s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        geneseqp1990s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      geneseqp2000s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          geneseqp2001s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  geneseqp2002s:*
                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                           US-10-613-076-48
1857
                                                                                                                  February 10,
                                                                                                                                                                                                                 Perfect score:
                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ••
                                                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database
                                                                                                                    ë
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

imm cDN pol nov LP2 aci PRO PRO PRO PRO PRO PRO con pol nov Human Human Human Human Human Amino Human Human Human Human Human Human Human Human Húman Human Human Human Novel Human Description Abb10532 Abp67119 Adb31684 Adul 7999
Abblo361
Abblo361
Adb31623
Adb31623
Adb31623
Adb31623
Adb31623
Adb31623
Adb31623
Adb31623
Adb31624
Adb3186
Adb3186
Adb3186
Abb1624
Abb1624 Adm87304 Aau18060 Aab12304 SUMMARIES ABR66150 ABR65540 ABU99480 ADB31684 **ABP66948** ADB31623 ABU58413 ABU87961 ABU84276 AAB12304 AAB80249 Query Match Length DB 1348 1348 857.5 857.5 857.5 857.5 857.5 857.5 857.5 Score 1856 1856 1390 1390 1390 1390 1052 857.5 857.5 Result No.

	PRO PRO Bec sec	Human Novel Human	Abu80447 Abu80441 Abc01811 Abr99365	ABU804417 ABU80447 ABR99365 ABR99365	0000	0000	4 4 4 4 0 0 0 0 1 0 0 0	ບ່າບ້າບ້າ	857. 857.	4 4 4 4 7 60 44 73	
	Bec	Human Human	Abu86206 Abu67419	ABU86206 ABU67419	φ φ	360	46.2	ru ru	857.	41	
_	PRO	Human	Abu89365	ABU89365	9	360	46.2	'n	857	4	
	Bec	Nove1 Human	Abu91672 Abu71928	ABU91672 ABU71928	9 9	360	46.2 46.2	ri ri	857	8 G G	
	Pru.	Novel	Abu97966	ABU97966	9	360	46.2	ιί	857	37	
	hum	Novel	Abu98751	ABU98751	9	360	46.2	'n	857	36	
	PRO	Human	Abu85591	ABU85591	9	360	46.2	'n	857.	35	
	Bec	Human	Abr94618	ABR94618	v	360	46.2	, n	857	. w	
	Bec	Human	Abo02702	ABO02702	9	360	46.2	'n	857	32	
	вес	Human	Abo08650	AB008650	ø	360	46.2	'n	857	31	
	Вес	Human	Abu92573	ABU92573	v	360	46.2	'n	857	30	
	hund	Novel	Abu96142	ABU96142	v	360	46.2	ים י	857	7 6	
	Bec C	Human Human	Abu71482 Abr68089	ABR68089	o o	360	46.2	n, n	857	27	
	E E	Novel	Abu89840	ABU89840	9	360	46.2	'n	857	56	
	PRO	Human	Abu82719	ABU82719	9	360	46.2	'n	857	25	

ADM87304 standard; protein; 340 AA.

RESULT 1 ADM87304 ADM87304;

Human protein SEQ ID NO:397. 03-JUN-2004 (first entry)

respiratory; cytostatic; antiarthritic; antiinflammatory; gastrointestinal; antibacterial; immunosuppressive; antidiabetic; antibacterial; immunosuppressive; antidiabetic; chromosome tag; genetic fingerprinting; nutritional supplement; cancer; inflammatory condition; arthritis; inflammatory bowel disease; crohn's attential; inflammatory bowel disease; crohn's disease; sepsis; rheumatoid arthritis; diabetes mellitus type 1; graft versus host disease; human. New isolated polynucleotides and polypeptides, useful for treating, e.g. cancer, lung or liver fibrosis, arthritis, inflammatory bowel disease, Crohn's disease, rheumatoid arthritis, diabetes mellitus type 1 or graft 9 The present invention describes an isolated polynucleotide (I): (a) comprising a nucleotide sequence selected from SEQ ID NO:1-244; or which encodes a polypeptide with biological activity, where the Wang J; Ä F, Xue Wang Z; Zhang J, Ren D, Zhao QA, Claim 20; SEQ ID NO 397; 591pp; English. 19-JUL-2002; 2002WO-US022858 21-JUL-2001; 2001US-0306971P. 28-MAR-2002; 2002US-00112944. Weng G, Wang I Yang Y, Wer , Ghosh MJ, WPI; 2004-143291/14. N-PSDB; ADM87060. versus host disease. (NUVE-) NUVELO INC. WO2004009834-A2. Homo sapiens. Tang YT, Ya Wehrman T, 29-JAN-2004.

```
GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
```

OM protein - protein search, using sw model

Pebruary 10, 2006, 16:23:55 ; Search time 43 Seconds Run on:

(without alignments)
763.021 Million cell updates/sec

US-10-613-076-48
1857
1 MEGWLTLPTLCRFLLWAFTI......FGPPRPQQAAYGXXCYAENX 341 Perfect score: Sequence:

BLOSUM62 Scoring table:

Gapop 10.0 , Gapext 0.5

283416 seqs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

PIR 80:*
1: pir1:*
2: pir2:*
): pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

chondroitin sulfat	hypothetical prote	proteoglycan link	neurotrophic recep	hypothetical prote	Ig lambda chain pr	Ig lambda chain pr	Ig lambda chain V	unc-5 protein - Ca	unc-5 protein, lon	sialoadhesin - mou	Ig lambda chain -	connectin 3B - chi	perlecan precursor	secretory componen	Ig lambda chain -	
A55885	T42681	A29165	B45082	D83218	LVHU2	804526	S30528	T32541	B44294	850065	836063	PN0568	A38096	QRRTGS	825749	
N	~	~	~	N	-	~	~	N	-	7	0	N	~	ч	7	
113	1069	101	943	468	117	117	120	616.	947	1694	86	1323	4391	769	235	
6.6	9.5	8.9	6.7	5.8	9.9	5.6	5.6	5.6	5.6	5.6	5.5	5.5	5.5	5.4	5.4	
183.5	170	164.5	125	107.5	104.5	104.5	104.5	104	104	104	102.5	102	102	101	100	
30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	

ALIGNMENTS

Drain link protein-1 - human

C;Species: Homo sapiens (man)

C;Species: Homo sapiens (man)

C;Date: 17-Nov-2000 #sequence_revision 17-Nov-2000 #text_change 09-Jul-2004

C;Accession: JC7505

R;Hirakawa, S; Ochashi, T.; Su, W.D.; Yoshioka, H.; Murakami, T.; Arata, J.; Ninomiya Biochem. Blophys Res. Commun. 276, 982-989, 2000

A;Hitle: The brain link protein=1 (BRALI): cDNA cloning, genomic structure, and charac A;Ccession: JC7505

A;Reference number: JC7505

A;Reference number: JC7505

A;Residues: 1-340 *HIR>
A;Residues: 1-340 *HIR>
C;Genetics: This protein stabilizes the binding between hyaluronan and brain-specific h

A;Gene: brall C;Superfamily; proteoglycan link protein; immunoglobulin homology; link protein repeat C;Keywords: brain; tandem repeat

ö Gapa . 0 Length 340; 2; Indels Score 1856; DB 2; Pred. No. 6.2e-144; Query Match
99.9%; Score 1856; D
Best Local Similarity 99.4%; Pred. No. 6.2e
Matches 338; Conservative 0; Mismatches

61 TTPPSYKVRWSKVBPGELRETLILITNGLHARGYGPLGGRARMRRGHRLDASLVIAGVRL 120 1 MPGWLTLPTLCRFLLWAPTIFHKAQGDPASHPGPHYLLPPIHEVIHSHRGATATLPCVLG 60 1 MPGWLTLPTLCRFLLWAFTIFHKAQGDPASHPGPHYLLPPIHEVIHSHRGATATLPCVLG a ઠે 8

8

SQLYQAWTEGLDWCNAGWLLEGSVRYPVLTARAPCGGRGRPGIRSYGPRDRWRDRYDAFC 240

181

ઠે

241 FTSALAGQVFFVPGRLTLSEAHAACRRRGAVVAKVGHLYAAWKFSGLDQCDGGWLADGSV 300 301 RFPITTPRPRCGGLPDPGVRSFGFPRPQQAAYGXXCYAEN 340 a a 8

RESULT 2 LKHU

301

proteoglycan link protein precursor [validated] - human

GenCore version 5.1.7 Copyright (c) 1993 - 2006 Biocceleration Ltd.

OM protein - protein search, using sw model

February 10, 2006, 16:20:24; Search time 254 Seconds (without alignments) 947.186 Million cell updates/sec Run on:

US-10-613-076-48 1857 1 MEGWLTLPTLCRFLLWAFTI.......PGFPRPQQAAYGXXCYAENX 341 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

2166443 seqs, 705528306 residues Searched:

2166443

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Total number of hits satisfying chosen parameters:

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

UniProt_05.80:*
1: uniprot_sprot:*
2: uniprot_trembl:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Q9gzv7 homo sapien	Q5t3j0 homo sapien	Q9esm2 rattus norv	Q9esm3 mus musculu	_		Q96886 homo sapien		rattus r	Q6dci6 xenopus lae		Q80wm5 mus musculu	_		-		Q4shl9 tetraodon n	_	P03994 rattus norv	P55252 bos taurus			-	Q80wm4 mus musculu		Q60h44 brachydanio		PSS066 mus musculu		homo	Q41e67 homo sapien
SUMMARIES	QI	HPLN2 HUMAN	QST3JO HUMAN	HPLN2 RAT	HPLN2 MOUSE	QST3J1_HUMAN	Q4S472_TETNG	HPLN3_HOMAN	QSBJ60_XENTR	Q5R1X6_RAT	Q6DCI6_XENLA	Q7ZX17_XENLA	HPLN3_MOUSE	HPLN1_HUMAN	Q6NV41 BRARE	HPLN1 CHICK	HPLN1_PIG	Q4SHL9_TETNG	HPLN1_MOUSE	HPLN1_RAT	HPLN1_BOVIN	Q4SE78_TETNG	Q4S1V7_TETNG	HPLN1_HORSE	HPLN4 MOUSE	HPLN4_HUMAN	Q60H44_BRARE	Q4RUPO_TETNG	CSPG3 MOUSE	CSPG3 RAT	CSPG3_HUMAN	Q4LB67_HUMAN
	DB	-	7	-	-	N	~	-	7	7	n	~	-	-	~	Н	-	N	Н	Н	-	~	~	-	-	-	~	~	Н	-	-	N
	* Query Match Length DB	340	340	341	341	185	386	360	383	359	394	359	359	354	363	355	354	313	326	354	354	314	319	354	400	402	332	883	1268	1257	1321	1335
	Query Match	9.66	99.9	91.2	91.0	53.9	48.2	46.2	45.8	45.7	45.7	45.1	44.9	43.7	43.4	43.0	42.8	42.8	42.7	42.6	42.5	42.5	42.5	42.5	41.4	40.1	38.4	37.6	31.2	31.0	30.6	30.6
	Score	1856	1856	1693.5	1690.5	1000	895	857.5	820.5	848	848	837	834	811.5	805.5	799	795.5	795	792.5	791.5	789.5	789	788.5	788.5	768	744.5	714	698	579	576.5	568.5	568.5
	Result No.	-	8	m	4	5	9	7	6	0	10	11	12	813	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

OSien4 macaca fasc	Osis41 pan troglod	Q75zi3 brachydanio	Q9w6el gallus gall	Q28062 bos taurus	P41725 felis silve	Q483c4 tetraodon n	Q5t3i5 homo sapien	Q96gw7 homo sapien	Q5sz10 homo sapien	Q80wt7 mus musculu	Q4rup1 tetraodon n	Q90953 gallus gall	Q59f90 homo sapien	
OSISN4 MACPA	CSPG3_PANTR	Q75ZI3 BRARE	Q9W6B1 CHICK	PGCB BOVIN	PGCB FELCA	Q4S3C4 TETNG	QST3 IS HUMAN	PGCB HUMAN	OSSZIO HUMAN	Q80WT7 MOUSE	Q4RUP1 TETNG	CSPG2 CHICK	QS9F90_HUMAN	
0	-	N	~	-	-	~	~	ч	N	~	~	н	7	
1059	1321	1570	1290	912	417	1441	671	911	911	883	2586	3562	820	
30.5	30.5	30.1	30.0	29.6	29.4	29.3	29.5	29.5	29.5	28.9	28.9	28.7	28.6	
266	565.5	559	556.5	550	546.5	545	543	543	543	536.5	536	533.5	530.5	
32	33	34	35	36	37	38	39	40	41	42	43	44	45	

ALIGNMENTS